In the Claims:

Please amend claims 7-22, as indicated below.

1. (Previously presented) A system, comprising:

a network system comprising a plurality of network components;

a host computer system coupled to the network system, wherein the host computer system is configured to:

perform system discovery to generate data indicative of a configuration of the plurality of network components;

detect a failure of one of the components included in the plurality of network components;

in response to identifying the failed component, update an availability of the network system using the data indicative of the configuration of the plurality of network components; and

store data indicative of the availability of the network system.

2. (Previously presented) The system of claim 1, wherein the host computer system is configured to use the updated availability to calculate a risk of the network system becoming unavailable during one or more exposure periods following the failure and prior to a repair or replacement of the failed component, and store data indicative of the risk.

3. (Previously presented) The system of claim 2, wherein the data indicative of the risk includes data indicative of a probability of the network system becoming unavailable during each of the one or more exposure periods.

4. (Original) The system of claim 2, wherein the data indicative of the risk includes data indicative of an expected number of system failures per a given population for each of the one or more exposure periods.

5. (Previously presented) The system of claim 2, wherein the host computer system is configured to:

compare the risk of the network system becoming unavailable for a first exposure period of the one or more exposure periods to a threshold value; and

if the risk is higher than the threshold value, determine an acceptable exposure period, wherein the risk of the network system becoming unavailable during the acceptable exposure period is lower than the threshold value, and provide an indication of the acceptable exposure period.

6. (Previously presented) The system of claim 1, wherein the host computer system is configured to update the availability of the network system by calculating the instantaneous availability of the plurality of network components.

7. (Currently amended) A computer readable storage medium, ~~comprising~~ storing program instructions computer executable to:

receive data indicating a configuration of components included in a network system;

receive an indication of a failure of one of the components in the network system;

compute an availability of the network system from the data in response to the failure of the one of the components, and

store availability data comprising data indicative of the availability of the network system.

8. (Currently amended) The computer readable storage medium of claim 7, wherein the availability data comprises a table comprising one or more entries, wherein each entry in the table indicates a risk of the network system being disrupted during a respective exposure period following the failure and prior to a repair or replacement of the failed component, wherein the risk depends on the availability of the network system.

9. (Currently amended) The computer readable storage medium of claim 8, wherein each entry in the table indicates a probability of the network system being disrupted during the respective exposure period.

10. (Currently amended) The computer readable storage medium of claim 8, wherein each entry in the table indicates an expected number of system failures per a given population for the respective exposure period.

11. (Currently amended) The computer readable storage medium of claim 8, wherein a first exposure period of the one or more exposure periods is an estimated time to replace the one of the components that failed.

12. (Currently amended) The computer readable storage medium of claim [[7]] 8, wherein the program instructions are computer executable to evaluate the risk of the network system being disrupted by comparing the risk of the network system being disrupted for at least one of the one or more exposure periods to a threshold risk.

13. (Currently amended) The computer readable storage medium of claim 12, wherein the program instructions are computer executable to store an indication of an

unacceptably high risk in response to the risk of the network system being disrupted for at least one of the one or more time periods being greater than the threshold risk.

14. (Currently amended) The computer readable storage medium of claim 13, wherein the indication of the unacceptably high risk includes an indication of an acceptable exposure period.

15. (Currently amended) The computer readable storage medium of claim 14, wherein the program instructions are computer executable to provide the acceptable exposure period to a monitoring service.

16. (Currently amended) The computer readable storage medium of claim 7, wherein the program instructions are computer executable to calculate the availability using reliability block diagram analysis.

17. (Currently amended) The computer readable storage of claim 7, wherein the program instructions are computer executable to calculate the availability using fault tree analysis.

18. (Currently amended) The computer readable storage medium of claim 7, wherein the program instructions are computer executable to calculate the availability using Monte Carlo analysis.

19. (Currently amended) The computer readable storage medium of claim 7, wherein the program instructions are computer executable to calculate the availability using Markov chain analysis.

20. (Currently amended) The computer readable storage medium of claim 7, wherein the program instructions are computer executable to calculate the availability of a group of non-redundant components by multiplying individual availabilities of each non-redundant component in the group.

21. (Currently amended) The computer readable storage medium of claim 20, wherein at least one of the non-redundant components includes a plurality of redundant components.

22. (Currently amended) The computer readable storage medium of claim 7, wherein the program instructions are computer executable to compute the availability of the network system by computing the instantaneous availability of the network system.

23. (Original) A method of operating a network system, the method comprising:

receiving data indicating a configuration of components that are included in the network system;

detecting a failure of one of the components;

computing an availability of the network system from the data in response to said detecting; and

storing data indicative of the availability of the network system generated by said computing.

24. (Previously presented) The method of claim 23, further comprising storing data indicative of a risk of the network system being disrupted during one or more exposure periods following the failure and prior to a repair or replacement of the failed component, wherein the risk depends on the availability of the network system.

25. (Original) The method of claim 24, wherein the data indicative of the risk includes data indicative of a probability of the network system being disrupted during each of the one or more exposure periods.

26. (Original) The method of claim 24, wherein the data indicative of the risk includes data indicative of an expected number of system failures per a given population for each of the one or more exposure periods.

27. (Original) The method of claim 24, further comprising comparing the risk of the network system being disrupted for at least one of the one or more exposure periods to a threshold risk.

28. (Original) The method of claim 27, further comprising storing an indication of an unacceptably high risk in response to the risk of the network system being disrupted for at least one of the one or more exposure periods being greater than the threshold risk.

29. (Original) The method of claim 28, wherein the indication comprises an indication of an acceptable exposure period.

30. (Original) The method of claim 29, further comprising providing the indication of the acceptable exposure period to a monitoring service.

31. (Previously presented) The method of claim 24, wherein a first exposure period of the one or more exposure periods is an estimated time to replace the one of the components that failed.

32. (Original) The method of claim 23, wherein said computing comprises calculating the availability using reliability block diagram analysis.

33. (Original) The method of claim 23, wherein said computing comprises calculating the instantaneous availability of the network system.

34. (Original) A system comprising:

a network system comprising a plurality of components;

means for performing system discovery for the network system, wherein the means for performing system discovery generate data indicative of a configuration of the network system;

means for detecting a failure of one of the plurality of network components; and

means for calculating an availability of the network system from the data generated by the means for performing system discovery, wherein the means for calculating an availability calculate the availability in response to the means for detecting a failure detecting that a first one of the plurality of network components has failed, wherein the means for calculating the availability store data indicative of the availability of the network system.

35. (Previously presented) A system, comprising:

a network system comprising a plurality of network components;

a first network device coupled to the network system, wherein the first network device includes a processor and a memory, wherein the first network device is configured to:

perform system discovery to generate data indicative of a configuration of the plurality of network components;

detect a failure of one of the components included in the plurality of network components;

in response to detecting the failure, calculate an availability of the network system using the data indicative of the configuration of the plurality of network components; and

store data indicative of the availability of the network system.

36. (Original) The system of claim 35, wherein the first network device is a host computer system.

37. (Original) The system of claim 35, wherein the first network device is an array controller.

38. (Original) The system of claim 35, wherein the first network device is a network switch.

39. (Previously presented) The system of claim 1, wherein said performing system discovery comprises:

sending a request for identification data to a particular network component of the plurality of network components; and

the particular network component returning a unique identifier in response to the request for identification.

40. (Previously presented) The system of claim 1, wherein said detecting the failure comprises:

monitoring performance of the one of the components; and

determining that the one of the components has failed if the performance falls below a threshold.